

ENVIRONMENTAL CODE  
ELLIS COUNTY, KANSAS

CHAPTER 1

Administrative Procedures

SECTION 1-1.0 AUTHORITY AND POLICY

- 1-1.1 Legal Authority. This code is adopted under the authority granted to the Board of County Commissioners by K.S.A. 19-3701 et. seq. or K.S.A. 12-3301 et. seq., as amended.
- 1-1.2 Declaration of Finding and Policy. The Commissioners find that the provision of adequate and reasonable control over environmental conditions in the county is necessary and desirable. **An environmental code establishes standards to eliminate and/or prevent the development of environmental conditions that are hazardous to health and safety, and promotes the economical and planned development of the land and water resources of the county.** For these reasons and objectives, it will be the policy of the Board of County Commissioners to adopt and amend an environmental code to provide current regulation of practices that affect health and safety.
- 1-1.3 Purpose. The purpose and intent of this chapter is to prescribe the administrative procedures to be followed in administering this environmental code or any amendments thereto; and to prescribe rules and regulations for controlling practices to minimize health and safety hazards.
- 1-1.4 Title. This code shall be known and referred to as the Ellis County Environmental Code.
- 1-1.5 Applicability. The procedures prescribed in this chapter shall be followed in administering this code and any amendments thereto.
- 1-1.6 Effective Date. This code shall become effective September 27, 1992.
- 1-1.7 The Administrative Agency for Ellis County shall be the Board of County Commissioners of Ellis County.

SECTION 1-2.0 DEFINITIONS: The following words, terms and phrases appear in more than one chapter of this Code and thus have general application and usage. Words, terms, and phrases appropriate or applicable to specific chapters within this Code may be found in that particular chapter.

- 1-2.1 Administrative Agency means the entity authorized to implement the provisions of this code.
- 1-2.2 Administrative Rules means those rules and regulations contained in chapter one of this environmental code which prescribe general procedures to be followed in the administration of the environmental code adopted by the county.
- 1-2.3 Authorized Representative means any person who is designated by the Administrative Agency to administer this code.
- 1-2.4 Board of County Commissioners means the Board of County Commissioners of Ellis County, Kansas.

- 1-2.5 Board of Health means the Ellis County Board of Health. (K.S.A. 65-201)
- 1-2.6 Hearing Officer means an individual, appointed by the Administrative Agency, to hear appeals from decisions relating to the enforcement and administration of this code.
- 1-2.7 Person means an individual, corporation, partnership, association, state, or political subdivision thereof, federal, state agency, municipality, commission, or interstate body or other legal entity recognized by law as the subject of rights and duties.
- 1-2.8 Premise means any lot or tract of land and all buildings, structures, or facilities located thereon.
- 1-2.9 State Department means the Kansas Department of Health and Environment.
- 1-2.10 Subdivision means any tract of land that is or has been subdivided into two or more lots for the purpose of sale or building development, whether immediate or future, including the streets, alleys or other portions thereof intended to be dedicated for public use; and any re-subdivision of lands or lots.

### **SECTION 1-3.0      ADMINISTRATIVE POWERS AND PROCEDURES**

- 1-3.1 Right of Entry. Representatives of the Administrative Agency shall have the power and authority to inspect for compliance with the County Environmental Code.
- 1-3.2   Permit and License.**
- 1-3.2.1 Applications for Permits and Licenses. Every person required by this environmental code to obtain a permit or license shall make application for such permit or license to the Administrative Agency.
- 1-3.2.2 Issuance of Permit or License. After receipt of an application as required by this code, the Administrative Agency shall begin such investigation as deemed necessary to determine whether the permit license should be issued or denied, and shall issue or deny the permit or license within 30 days of such receipt. If the permit or license is denied, the Administrative Agency shall send the applicant a written notice and state the reasons for rejection.
- 1-3.2.3 Permit Nontransferable. No permit or license required by this environmental code shall be transferable, nor shall any fees required and paid therefor be refundable.
- 1-3.2.4 Permit Revocation. All permits are subject to revocation for reasons of noncompliance or misrepresentation.
- 1-3.2.5 Standard Fees. The Administrative Agency shall establish a schedule of fees for all permits and licenses required by the code, and said fees shall be paid into the Administrative Agency. The Administrative Agency shall not process any application for a permit or license until the required fee has been paid. (K.S.A. 19-3702.)
- 1-3.3   Notices, Orders, Appeals.**
- 1-3.3.1 Notice of Violations. When the Administrative Agency determines that there has been a violation of any provision of this Code, notice of such violation shall be issued to the person responsible.  
The notice shall:  
a. be in writing;

- b. include a statement of why the notice is being issued;
- c. allow a reasonable period of time as set by the Administrative Agency for performance of any work required by the notice; and,
- d. be properly served upon the owner or agent.

Such notice shall be deemed properly served when a copy thereof has been sent by registered mail to the last known address of the owner or agent.

1-3.3.2 Appeal for Hearing. Any person aggrieved by any notice or order issued by the Administrative Agency under the provisions of this environmental code may request, and shall be granted, a hearing on the matter before the Hearing Officer; provided such person shall file with the Administrative Agency within ten working days after the date of issuance of the notice or order, a written petition requesting a hearing and setting forth the grounds upon which the request is made. The filing of the request for a hearing shall operate as a stay of the notice or order. Upon receipt of such petition, the Administrative Agency shall confer with the Hearing Officer and set a time and place for such hearing and shall give the petitioner written notice thereof. At such hearing, the petitioner shall be given an opportunity to show why such notice or order should be modified or withdrawn. The hearing shall be commenced no later than ten working days after the date on which the petition was filed; provided, that upon request of the petitioner, the Administrative Agency may postpone the hearing for a reasonable time beyond such ten-day period, when in the Agency's judgement the petitioner has submitted justifiable reason for such postponement.

1-3.3.3 Report of Hearing. Within ten working days after such a hearing, the Hearing Officer shall submit the findings of the hearing in writing to the Administrative Agency. The findings shall include a recommendation that the order be sustained, modified, or withdrawn. Upon the receipt of the report of the Hearing Officer, the Administrative Agency shall consider the report and issue an order, confirming, modifying or withdrawing the notice or order, and shall notify the appellant in the same manner as is provided for in Sec. 1-3.3.1.

1-3.3.4 Emergency Orders. Whenever the Administrative Agency finds that an emergency exists which requires immediate action to protect the public, the Agency may issue an order reciting the existence of such an emergency, specifying action be taken to meet the emergency. Such an order shall be effective immediately. Any person to whom such an order is directed shall comply therewith immediately.

#### **1-3.4 Records.**

1-3.4.1 Permit Applications. Applications for permits or licenses required by this code shall be managed by the Administrative Agency.

1-3.4.2 Official Actions. A written record of all official actions taken on applications for permits and licenses required by this environmental code shall be managed by the Administrative Agency.

1-3.4.3 Proceedings of Hearings. The proceedings of all hearings, including findings and decisions of the Hearing Officer, together with a copy of every notice and order related thereto shall be filed with the Administrative Agency. Transcripts of the proceedings of hearings need not be transcribed unless a judicial review of the decision is sought.

### **1-3.5 GENERAL PROVISIONS**

- 1-3.5.1 Enforcement Procedure. The County Attorney or County Counselor shall enforce the provisions of this code and other environmental codes adopted by the county and is hereby authorized and directed to file appropriate actions for such enforcement, upon request of the Administrative Agency. Actions of injunction, mandamus, and quo warranto may be utilized for enforcement of these codes and shall be governed by the provisions of the Kansas Code of Civil Procedure.
- 1-3.5.2 Penalties. In addition to, and independently of, the enforcement procedures provided in section 1-3.5.1, any violation of any provision of an environmental code shall be deemed to be a misdemeanor and upon conviction shall be punishable by a fine not to exceed two hundred dollars (\$200) for each offense. Each day's violation shall constitute a separate offense. K.S.A. 19-3707.
- 1-3.5.3 Disclaimer of Liability. This code and other environmental codes adopted shall not be construed or interpreted as imposing upon the county or its officials or employees (1) any liability or responsibility for damages to any property, or (2) any warranty that any system, installation or portion thereof that is constructed or repaired under permits and inspections required by code will function properly.
- 1-3.5.4 Separability. If any clause, sentence, paragraph, section or subsection of this code shall for any reason, be adjudged by any court of competent jurisdiction to be unconstitutional and invalid, such judgement shall not affect, repeal or invalidate the remainder thereof, but shall be confined to the clause, sentence, paragraph, section or subsection thereof so found unconstitutional and invalid. (K.S.A 19-3708)

ENVIRONMENTAL CODE  
ELLIS COUNTY, KANSAS  
CHAPTER 2

**ONSITE WASTEWATER MANAGEMENT**

**SECTION 2-1.0      PURPOSE AND INTENT.**

Sewage is a potential source of disease and a hazard to the health, safety, and welfare of the public. It is the purpose of this chapter to provide minimum standards for the location, design, construction, maintenance and use of on-site wastewater systems, and the removal and disposal of materials from such facilities within the legal boundaries of Ellis County.

**SECTION 2-2.0      APPLICABILITY.**

The provisions of this chapter shall apply to all unincorporated areas located in Ellis County.

**SECTION 2-3.0      DEFINITIONS.**

- 2-3.1 Nuisance means conditions or activities which have or threaten to have a detrimental effect on the health of the public or its members.
- 2-3.2 Private Wastewater System. Means any system which does not hold a Kansas Water Pollution Control permit . This includes wastewater disposal systems which function by soil absorption, evaporation, transpiration, holding tanks, or any combination of the above.
- 2-3.3 Domestic Wastewater means wastewater originating primarily from kitchen, bathroom and laundry sources, including waste from food preparation, dishwashing, garbage-grinding, toilet, baths, showers and sinks.
- 2-3.4 Sanitary Privy means a facility designed for the disposal of non-water carried wastes from the human body.
- 2-3.5 Sanitary Service means the pumping out and/or removal of sewage, sludge, or human excreta from sanitary privies, vaults, septic tanks, or private wastewater systems; and the transportation of such material to a point of final disposal.
- 2-3.6 Sewage means any substance that contains any of the waste products or excrementitious or other discharges from the bodies of human beings or animals, or chemical or other wastes from domestic, manufacturing or other forms of industry.
- 2-3.7 Wastewater System means any system along with attendant pipes and appurtenances designed and constructed to collect, store, treat, and dispose of domestic, industrial, or commercial waste.
- 2-3.8 Vaults/Holding Tank means a water-tight receptacle for the retention of sewage either before, during, or after treatment.

**SECTION 2-4.0      PROHIBITED PRACTICES.**

- 2-4.1 Use of Nonapproved Private Systems. No person shall use, or cause to be used, any private wastewater system, or sanitary privy constructed after adoption of this environmental code until it has been inspected and approved by the Administrative Agency or if it:

- a. has been enjoined as a public health nuisance by a court of competent jurisdiction;
- b. fails to comply with the provisions of this environmental code, and written notice thereof has been given by the Administrative Agency;
- c. discharges inadequately treated wastes onto the surface of the ground, or waters of the state or,
- d. receives non-domestic wastewater, causes vector breeding, produces offensive odors or any condition that is prejudicial to health and comfort.

2-4.2 Use of Private Systems Within 400 Feet of Public Sewer. No private wastewater system shall be constructed within 400 feet of an existing public sewer, unless the Administrative Agency finds that connection to such a sewer is not feasible and that a private wastewater system, meeting the requirements of this code, can be constructed on that property.

2-4.3 Location of Private Wastewater Systems Below Full/Flood Pool No portion of a private wastewater system shall be located below the flood pool elevation of any reservoir or full pool elevation of any pond, lake, or water supply reservoir unless written approval is obtained from the appropriate Administrative Agency.

2-4.4 Location of a Private Wastewater System Within 100 Feet of Well No portion of a private wastewater system shall be located less than 100 feet from private water wells unless the facility is of water tight construction. No sanitary sewer line, regardless of construction, shall be located less than 10 feet from private water wells.

2-4.5 Transfer of Property Ownership. No person shall transfer the ownership of any property with a private wastewater system or sanitary privy until it has been inspected and approved by the Administrative Agency.

## **SECTION 2-5.0      REQUIREMENTS FOR PRIVATE WASTEWATER SYSTEMS.**

2-5.1 Approval of Plans. After adoption of this code no person shall develop any private wastewater system until the plans and specifications for such system have been approved by the Administrative Agency. References approved by KDHE utilizing currently approved technology, shall be used as a guide by the Administrative Agency in reviewing and approving plans for private wastewater systems.

2-5.2 Permit. No person shall construct or modify, or permit to be constructed or modified, any private wastewater system until a permit has been issued by the Administrative Agency.

2-5.3 Maintenance. All persons holding a permit for use of a private wastewater system and responsible for its operation shall operate and maintain the system in conformity with standard operation practices.

2-5.4 Suitable Site. No site shall be approved if:

- a) connection to an approved public sewerage system is feasible or the site violates the provisions of Section 2-4.0 of this code;
- b) the site contains less than two acres of land exclusive of roads, streets, or other public rights-of-way or easements; or
- c) the soil, topography, and geology do not meet the requirements set forth in Section 2-6.0.

- 2-5.5 Construction Approval. All private wastewater systems developed or modified after the effective date of this environmental code must be inspected and approved by the Administrative Agency for compliance with the approved plans; and no portion of the system shall be covered or made inaccessible to inspection prior to approval.
- 2-5.6 Proper Maintenance and Operation. All private wastewater systems shall be maintained in good working condition. Whenever the Administrative Agency shall find any private wastewater system in violation of this code, the owner and/or user shall be ordered to correct the condition.
- 2-5.7 Waiver. The Administrative Agency shall have the authority to grant exceptions when reliable information is provided which can justify the exception without compromising the environment.

## **SECTION 2-6.0      MINIMUM STANDARDS**

- 2-6.1 Standards for Soil Topography and Geology. No private wastewater system which is dependent upon soil absorption for the disposal of wastewater, shall be constructed on any lot of any size unless specifying limits for soil, topography, geology as established in KDHE Bulletin 4-2 are met.
- 2-6.2 Standards for Discharge into Private Wastewater Systems. No cooling water, discharge from roof drains, discharge from footing tile drains or swimming pool wastewater shall be directed to the private wastewater system. No automotive grease, oil, antifreeze or toxic or hazardous waste from a commercial or manufacturing business or any other than domestic waste shall be discharged to a private wastewater system.
- 2-7.0 REQUIREMENTS FOR SANITARY PRIVIES.
- 2-7.1 Approval of Plans. No person shall construct or modify any sanitary privy until the plans and specifications for the proposed construction and/or modification have been approved by the Administrative Agency.
- 2-7.2 Approval of Construction. No person shall use, or make available for use, any newly constructed or modified sanitary privy until the construction has been inspected and approved by the Administrative Agency for compliance with approved plans.
- 2-7.3 Proper Maintenance. No person shall use, or offer for use, any sanitary privy that is not maintained in a clean and sanitary condition.
- 2-7.4 Vault Required in Certain Areas. In areas where the elevation of the groundwater is within six feet of the top of the ground, a watertight vault shall be provided in lieu of the standard pit.
- 2-7.5 Location. No sanitary privy shall be installed less than 100 feet from an existing well.

## **SECTION 2-8.0      SANITARY SERVICES**

No person shall remove or transport any wastes from any private wastewater system or sanitary privy, unless he holds a valid permit from the Administrative Agency.

- 2-8.1 Contracting With Unlicensed Persons Prohibited. No person responsible for operating a private wastewater system or sanitary privy shall contract with any person for sanitary service unless that person holds a valid permit.

2-8.2 Minimum Standards for Sanitary Service Equipment. All equipment used for rendering of sanitary service shall be of watertight construction and maintained in good working condition to ensure that all materials removed from private wastewater systems or sanitary privies will be transported to an approved point of disposal without spillage of the waste.

2-8.3 Disposal of Spillage. Any person removing or transporting any wastes from any private wastewater system or sanitary privy shall be responsible for any and all spillage.

**SECTION 2-9.0      REQUIREMENTS FOR SUBDIVISION DEVELOPMENT**

After adoption of this code no person shall develop any subdivision until the plans and specifications for wastewater management for such subdivision have been approved by the Administrative Agency.



ENVIRONMENTAL CODE  
ELLIS COUNTY, KANSAS  
CHAPTER 3  
**Non-Public or Semi-Public Water Supplies**

**SECTION 3-1.0**      **PURPOSE AND INTENT**

The provisions of this chapter are for the purpose of regulating and controlling the development, maintenance, and use of all water supplies other than public supplies in Ellis County, Kansas, in order that public health will be protected and the contamination and pollution of the water resources of the county will be prevented.

**SECTION 3-2.0**      **APPLICABILITY**

The provisions of this chapter shall apply to all unincorporated areas located in Ellis County, Kansas.

**SECTION 3-3.0**      **DEFINITIONS**

3-3.1 Non-Public Water Supply means all water supplies not meeting the definition of Semi-Public or Public Water Supply.

3-3.2 Semi-Public Water Supply means any water supply that is neither a public or non-public water supply. This would included but is not limited to any clubs, schools, care home, institution or commercial establishment that provides water for domestic use and has 2 through 9 service connections or serves 1 through 24 residents, members , customers etc. per year.

3-3.3 Public water supply means a system that has at least ten service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. K.S.A. 65-162a

**SECTION 3-4.0**      **REQUIREMENTS FOR NON-PUBLIC WATER SUPPLIES**

3-4.1 Permit. No person shall construct or reconstruct any water supply subject to regulations of this code until a permit has been obtained from the Administrative Agency.

3-4.2 Approved Plans. No permit to construct or reconstruct a water supply subject to regulations of this code shall be issued until the plans have been approved by the Administrative Agency.

**SECTION 3-5.0**      **REQUIREMENTS FOR SEMI-PUBLIC WATER SUPPLIES**

3-5.1 Permit. No person shall construct or reconstruct any water supply subject to regulations of this code until a permit has been obtained from the Administrative Agency.

3-5.2 Approved Plans. No permit to construct or reconstruct a water supply subject to regulations of this code shall be issued until the plans have been approved by the Administrative Agency.

3-5.3 Minimum Water Testing Standards. The following water tests will be required for all semi-public water supplies:

- a. An initial chemical analysis including total dissolved solids, chlorides, fluorides, phosphates and sulfates
- b. An annual nitrate test
- c. A semi-annual coliform and fecal coliform bacteria test

Testing shall be done by a state-certified lab. Results of the testing shall be submitted to the Administrative Agency. Upon finding coliform or fecal coliform bacteria, nitrates or other contaminants to be above the state drinking water standards, the owner of the system or the owner's agent shall notify the users of the specific water quality failures in writing within 7 days. Upon finding fecal coliform bacteria, the owner of the system shall, in addition to notifying the users, disinfect the system within 7 days as specified in KSU Cooperative Extension Service Bulletin MF-886, Revised, May 1989, Water Quality, Disinfection of Private Water Supplies. The Administrative Agency shall reserve the right to require further tests if, in their opinion, a potential exists for other contamination.

### **SECTION 3-6.0 MINIMUM STANDARDS FOR GROUNDWATER SUPPLIES**

3-6.1 Location. All wells used as sources of water for water supplies shall be separated from the specified sources of pollution by distances equal to or greater than those shown in Table I. Such distances may be increased by the Administrative Agency to provide assurance that the well will not be contaminated.

<u>Area</u>	<u>Minimum Separation</u>
Subsurface absorption field for septic tank	
effluent . . . . .	100 ft.
Pit privy . . . . .	100 ft.
Septic tank . . . . .	100 ft.
Barnyards, stables, manure piles animal pens, etc. . . . .	50 ft.
Streams, lakes and ponds. . . . .	50 ft.
Sewer lines, not constructed of cast iron or other equally water tight construction. . . . .	100 ft.
Sewer lines constructed of cast iron or other equally water tight construction . . . . .	10 ft.

3-6.2 Construction. The enforcement of this section of the Environmental Code shall be regulated in accordance with K.A.R. 28-30-1 through 28-30-10 et seq. as amended. Recommended standards for the design, construction and location of the well, and practices consistent with current approved technology shall be followed.

**SECTION 3-7.0      TRANSFER OF PROPERTY OWNERSHIP**

No person shall transfer the ownership of any property with a water supply subject to the regulations of this code until the supply is inspected by the Administrative Agency and the results of that inspection are made available to the transferee.

**SECTION 3-8.0 REQUIREMENTS FOR SUBDIVISION DEVELOPMENT**

After adoption of this code no person shall develop any subdivision until the plans and specifications for water supply provision and/or protection for such subdivision have been approved by the Administrative Agency.

ENVIRONMENTAL CODE  
ELLIS COUNTY, KANSAS  
CHAPTER 4

Protection of Wellheads and Aquifers

**SECTION 4-1.0 PURPOSE AND INTENT.**

The provisions of this chapter are for the purpose of protecting the public water supplies of Ellis County from contamination. Quality water supplies in sufficient quantity are necessary and vital resources for assuring the physical and economic well-being of present and future citizens of Ellis County. In this area of Western Kansas, potable water is recognized as a finite and valuable asset that must be protected if we wish Ellis County to continue to flourish and grow.

**SECTION 4-2.0 APPLICABILITY.**

The provisions of this chapter shall apply to wellhead protection Zones A and B in all unincorporated areas located in Ellis County, Kansas unless otherwise specifically stated. All public water supply wells in unincorporated areas shall be subject to the provisions of this chapter.

**SECTION 4-3.0 DEFINITIONS.**

4-3.1 Aquifer is a water-bearing rock medium; rock or sediment formation that can store and transmit water to wells.

- a. Confined aquifer is an aquifer overlain and underlain by confining beds that have significantly lower hydraulic conductivity than that of the aquifer medium; also called an artesian aquifer.
- b. Unconfined aquifer is an aquifer above which there are no confining rock layers of lower hydraulic conductivity to stop or significantly decrease water movement.

4-3.2 Authorized Representative is a representative of Ellis County who is designated by the County Commissioners to administer this code.

4-3.3 Calculated Fixed Radius is a wellhead protection zone delineation method. The method involves drawing a circle with a calculated radius based on a specified Time of Travel (such as a ten-year TOT). The radius is calculated using an analytical equation based on the rate of water withdrawal from the well. The radius of the protection zone for existing wells is based on the average annual withdrawal over the ten-year period 1985 to 1994. For wells that have less than 10 years of data but at least 5 years of data, the available data will be used to calculate the fixed radius. For new wells and for wells having less than 5 years of data, the fixed radius will be based on the annual appropriated use permitted by the State of Kansas Division of Water Resources until 5 years of data are available. At that time the average of the 5 years of data will be used.

4-3.4 Classes of Injection Wells are wells that dispose of hazardous or nonhazardous wastes.

- a. Class I injection wells are wells used to inject hazardous wastes or dispose of nonhazardous industrial wastes and treated municipal sewage below the deepest underground source of drinking water.
- b. Class II injection wells are wells used to inject fluids associated with the production of oil and natural gas or fluids and compounds used for enhanced hydrocarbon recovery. These wells normally inject below the deepest underground source of drinking water (USDW) except in cases where the USDW contains producible quantities of oil or gas.

- c. Class III injection wells are wells that inject fluids used in subsurface mining of minerals.
  - d. Class IV injection wells are wells which dispose of hazardous or radioactive wastes into or above an underground source of drinking water. These wells are prohibited.
  - e. Class V injection wells are wells not included in the other classes, that inject nonhazardous fluid into or above an underground source of drinking water. These wells are commonly referred to as shallow injection wells.
- 4-3.5 Computer modeling is a numerical flow model that describes the capture zones of specific wells as generated by the model. The model represents an average flow condition and does not attempt to represent the fluctuations in flow between wet and dry seasons. The wells were assumed to be fully penetrating to the depth of the saturated zone, to have constant discharge and to have an induced recharge of 3-inches per year. Effective porosity was assumed to be  $N=0.2$ .
- 4-3.6 Confined Feeding is a feeding operation involving animal unit(s) in either a confined area where manure may concentrate or in a situation where the concentration of animal(s) is such that vegetative cover cannot be maintained.
- 4-3.7 Contamination is the process of making groundwater impure, unclean, inferior, or unfit for domestic uses due to the introduction of undesirable elements.
- 4-3.8 Contingency plans are detailed plans for control, containment, recovery, and clean-up of hazardous materials released during floods, fires, equipment failures, leaks, or spills.
- 4-3.9 Development is the process of building or performing any surface construction, reconstruction, or alteration of land use or intensity of use.
- 4-3.10 Facility means something built, installed, or established for a particular purpose.
- 4-3.11 Groundwater is that part of the subsurface water which is in the zone of saturation.
- 4-3.12 Hazardous Material is a material which is defined in one or more of the following categories:
- a. Ignitable means a gas, liquid, or solid which may cause fires through friction, absorption of moisture, or which has a low flash point. Examples: white phosphorous and gasoline.
  - b. Carcinogenic or Mutagenic means a gas, liquid, or solid which is normally considered to cause cancer or mutations in cells. Examples: PCBs in some waste oils.
  - c. Explosive means a reactive gas, liquid, or solid which will vigorously and energetically react uncontrollably if exposed to heat, shock, pressure, or combinations thereof. Examples: dynamite, organic peroxides, and ammonium nitrate.
  - d. Highly Toxic means a gas, liquid, or solid so dangerous to humans as to constitute an unusual hazard to life. Examples: parathion and chlorine gas.
  - e. Moderately Toxic means a gas, liquid, or solid which, through repeated exposure or in a single large dose, can be hazardous to humans. Example: atrazine.
  - f. Corrosive means a material, whether acid or alkaline, which will cause severe damage to human tissue, or in case of leakage might damage or destroy other containers of hazardous materials and cause the release of their contents. Examples: battery acid and phosphoric acid.
- 4-3.13 Hazardous Waste is a discarded hazardous material.

- 4-3.14 Leaks and Spills means any unplanned or improper discharge of a potential contaminant, including any discharge of a hazardous material.
- 4-3.15 Perched water is localized ground water located above a main body of groundwater by an impermeable layer (such as rock, shale, dense clay, etc).
- 4-3.16 Primary Containment Facility means a tank, pit, container, pipe, or vessel of first containment of a liquid or chemical.
- 4-3.17 Public Water Supply System is a system for delivery to the public of piped water for human consumption, if this system has at least ten (10) service connections or regularly serves at least twenty-five (25) individuals daily at least sixty (60) days out of the year. This term includes any source, treatment, storage, or distribution facility used in connection with the system.
- 4-3.18 Secondary Containment Facility means a second tank, catchment pit, pipe, or vessel that limits and contains a liquid or chemical leaking or leaching from a primary containment area.
- 4-3.19 Tailwater pits are pits located at downgrade part of an irrigated field to catch excess or overflow irrigation water.
- 4-3.20 Wellhead Protection Area (WHPA) is the officially designated area on or through which contaminants are reasonably likely to move toward and reach a public water supply.
- 4-3.21 Wet pit is a man-made depression dug deep enough into the earth's surface to allow water from the water table to enter the pit.
- 4-3.22 Zones A and B are areas or zones of a WHPA surrounding the water supply wellhead. Zone A has a five-year time of travel (TOT) with a minimum radius of 300 feet. Zone B has a ten-year time of travel. When sufficient geological information is available, a numerical computer model is used to calculate capture zones A and B around each well. Otherwise, the calculated fixed radius is the delineation method used to determine the area in Zones A and B around each wellhead. This means that a contaminant entering the groundwater at the outer edge of the ten-year capture zone (Zone B) will, on the average, reach the well in ten years.

#### **SECTION 4-4.0      REQUIREMENTS FOR UNDERGROUND PETROLEUM STORAGE TANKS IN WHPAs**

- 4-4.1 Notification. Owners of existing underground storage tanks (USTs) are required to notify the Authorized Representative immediately of any release detection, unexplained inventory losses, upgrades, new installations, and fines assessed by other agencies for violations.
- 4-4.2 Compliance. Existing, newly constructed and reconstructed UST facilities shall comply with local, state, and federal fire and environmental UST regulations regarding tanks and pressurized lines.
- 4-4.3 Inspections. The Authorized Representative shall be notified of new or reconstructed UST installations so that they can be inspected and will make periodic inspections of all UST installations for compliance with local, state, and federal regulations and will spot check inventory records.
- 4-4.4 Containment. Newly constructed or reconstructed UST installations shall have double containment for both piping and tanks. This shall be accomplished with either a below-ground vaulted tank, a double walled tank, or other approved technology. All piping shall be double walled.

**SECTION 4-5.0**      REQUIREMENTS FOR ABOVEGROUND PETROLEUM STORAGE  
TANKS IN WHPAs

- 4-5.1 Notification. The Authorized Representative shall be informed immediately of all aboveground storage tank (AST) leaks and spills of materials that might potentially contaminate groundwater.
- 4-5.2 Compliance and Tank Size. Construction and maintenance of ASTs shall be in compliance with KDHE and state fire marshall regulations. These currently apply only to tanks with a capacity equal to or greater than 1,100 gallons for agricultural installations and equal to or greater than 660 gallons for industrial or governmental unit tanks.
- 4-5.3 Spill or Leak Detection and Containment.
- a. Zone A: Any newly constructed or reconstructed AST with a capacity equal to or greater than 660 gallons shall have an impermeable liner under it and shall have a retaining wall of a size that can contain a volume equal to or greater than 110% of the volume of the largest tank.
  - b. Zone B:
    - 1. Large tanks. Agricultural tanks holding 1,100 gallons or more and industrial or governmental tanks holding 660 gallons or more shall have an impermeable liner under them and shall have a retaining wall of a size that can contain a volume equal to or greater than 110% the volume of the largest tank.
    - 2. Small tanks. Owners of ASTs with a capacity smaller than those regulated shall maintain those tanks and pipes to prevent leaks. Tanks that rest on the ground shall be constructed so that leaks can be detected.
- 4-5.4 Piping. All newly constructed and reconstructed piping for ASTs shall be above ground.

**SECTION 4-6.0**      REQUIREMENTS FOR AUTOMOTIVE AND EQUIPMENT REPAIR  
SHOPS IN WHPAs

- 4-6.1 Compliance. All automotive and equipment service operations shall comply with KDHE prohibitions of the disposal into Class V wells of gasoline, diesel fuel, waste oil, antifreeze, degreasers, brake fluids, transmission fluids, or other non-sanitary wastes. Those petroleum wastes which can not be recycled shall be disposed of according to federal, state, and local waste regulations.
- 4-6.2 Restriction. Class IV wells are prohibited.
- 4-6.3 Clean-up. Absorbents shall be used to clean-up minor leaks and spills that occur during routine vehicle and machine maintenance. All materials used for spill clean-up and all wastes shall be disposed of according to federal, state, and local regulations.

**SECTION 4-7.0**      REQUIREMENTS FOR OIL AND GAS PRODUCTION OPERATIONS  
IN WHPAs

- 4-7.1 Cooperation. Assistance of the Kansas Corporation Commission (KCC) will be requested in recognizing the sensitivity of WHPAs and the need to provide priority to WHPAs in monitoring the adherence to KCC safety and environmental procedures.

4-7.2 Containment. All tank battery sites shall have containment structures that conform to state regulations.

4-7.3 Conforming to Statutes. Petroleum product transportation (including pipelines, rail, or truck), loading, storage, recycling, disposal, and container rinsing and disposal shall conform to all federal, state, and local statutes.

**SECTION 4-8.0**      REQUIREMENTS FOR UNDERGROUND NATURAL GAS AND OIL LINES IN WHPAs

4-8.1 Companies that have underground natural gas and/or oil lines shall recognize the Wellhead Protection Areas as sensitive, priority areas and monitor adherence to their company's safety and environmental procedures.

**SECTION 4-9.0**      REQUIREMENTS FOR PESTICIDE MANAGEMENT IN WHPAs

4-9.1 Label Directions. All pesticides shall be applied by EPA and state approved label directions.

4-9.2 Conforming to Statutes. Pesticide transportation, loading, storage, containment, mixing, application, disposal, and container rinsing and disposal shall conform to all federal, state, and local statutes.

**SECTION 4-10.0**      REQUIREMENTS FOR IRRIGATION TAILWATER PITS IN WHPAs

4-10.1 Irrigation Tailwater Pits. Tailwater pits shall not be allowed in Zone A.

**SECTION 4-11.0**      REQUIREMENTS FOR CONFINED FEEDING IN WHPAs

4-11.1 Zone A. Confined feeding shall not be allowed within a 300-foot radius of an existing public water supply well in Zone A.

4-11.2 Zone B. When Zone A is less than a 300-foot radius, then confined feeding shall not be allowed within a 300-foot radius of an existing public water supply well.

**SECTION 4-12.0**      REQUIREMENTS FOR NOTIFICATION IN WHPAs

4-12.1 Reporting. All accidental spills, discharges, or unexplained inventory losses of chemicals, including but not limited to, pesticides, fertilizers, and petroleum products, animal or human waste products, or unidentified materials, and regardless of volume, shall be reported immediately by the responsible party to the administrative agency. This allows the administrative agency to make the determination of an appropriate response.

**SECTION 4-13.0**      REQUIREMENTS FOR WET PITS IN WHPAs

4-13.1 Decontaminated or reclaimed. Wet pits not used for recreation, fishing, or sand and gravel production and identified as a pollution source by KDHE, shall be either decontaminated or reclaimed according to KDHE regulations.



**SECTION 4-14.0     REQUIREMENTS FOR LANDFILLS AND DUMPSITES IN WHPAs**

4-14.1 Restrictions. Sanitary and construction/demolition landfill sites and other commercial dumpsites shall not be allowed.

**SECTION 4-15.0     REQUIREMENTS FOR HAZARDOUS OR RADIOACTIVE WASTE IN WHPAs**

4-15.1 Facilities. Facilities for the transportation, storage, collection, or disposal of hazardous or radioactive wastes shall not be allowed.

4-15.2 Small Quantity Hazardous Waste Generators. All commercial facilities producing hazardous wastes in volumes not regulated by the state shall manage that waste in a manner that will not contaminate the groundwater.

**SECTION 4-16.0     REQUIREMENTS FOR CLASS IV and V WELLS IN WHPAs**

4-16.1 Restrictions - Class IV Wells. Class IV wells are prohibited.

4-16.2 Restrictions - Class V Wells. Class V wells shall not receive hazardous or radioactive wastes.

**SECTION 4-17.0     REQUIREMENTS FOR MUNICIPAL WASTEWATER TREATMENT PLANTS IN WHPAs**

4-17.1 Restrictions. New municipal wastewater treatment plants shall not be allowed.

**SECTION 4-18.0     REQUIREMENTS FOR DISPOSAL OF NONAGRICULTURAL WASTEWATER TREATMENT SLUDGES IN WHPAs**

4-18.1 Restrictions. Land application of nonagricultural wastewater sludges shall not be allowed.

**SECTION 4-19.0     REQUIREMENTS FOR CEMETERIES IN WHPAs**

4-19.1 Restrictions. New cemeteries shall not be allowed.